

LAKE SAMMAMISH STATE PARK

ARC
MACLEOD-RECKORD

LAKE SAMMAMISH STATE PARK



1. SUNSET BEACH
2. RESTAURANT / FAMILY CENTER
3. ROWING / KAYAKING BOATHOUSE
4. INDOOR SOCCER ARENA
5. RUSTIC RETREAT CENTER

EXECUTIVE SUMMARY

Design Mission

Lake Sammamish State Park will be developed to enhance its beauty and purpose and to take its rightful place as one of the State's great public parks and places.

Design Overview

ARC Architects and MacLeod Reckord Landscape Architects have collaborated on design solutions that will set the stage for a re-birth of Lake Sammamish State Park. Our strategies are tailored for this park and build upon our experience with public parks for cities and counties in Washington and Oregon and, most recently, work we are doing for Cape Disappointment, another Washington State Park.

For Lake Sammamish State Park, our designs meet all stated needs and, more than occasionally, offer insights into ways to enhance them. The designs embrace the enthusiasm and optimism implicit in the competition and respect the natural and cultural setting of the Park. We have developed designs that:

- fit the State's and public's expectations about how buildings in state parks should look
- reflect their use and, when viewed as a whole, are aesthetically linked
- maintain nearby and distant views
- adhere to site constraints
- aggressively embrace environmental and sustainable design, and
- create great places that people will recall fondly and come back to often

PLANNING AND DESIGN PRINCIPLES

Our team began by formulating planning and design principles to guide us towards sensitive, inspired solutions. Some principles address environmental and sustainable design; others help create settings that are memorable; still others speak to the importance of budgets and public input.

CREATE PARKNESS

Challenge

As truly beautiful as it is, the park does not presently feel as park-like as most state parks its size. Existing buildings are a smattering of different styles, and often of mediocre quality. New buildings and their sites should create a sense of "parkness" that visitors recognize and that reflects the park's stature within the community and the Washington State Parks system.

Response

- Building forms are recognizable: gables, sheds, arbors and porches
- Materials are natural and naturally colored
- Building structures are exposed
- Detailing is time-tested and timeless

TOUCH THE LAND GENTLY – the Natural Landscape

Challenge

Stewardship of fish and wildlife habitat, wetlands, creeks, the lake, and vegetation is important for all development within the park. Site and building development should have minimum impacts.

Response

- Wetlands are never encroached upon
- All buildings are 200 feet or more from the lake's edge
- There is negligible encroachment into wetland buffers (only at Sunset Beach and the Restaurant / Family Center), to be mitigated with buffer averaging
- Bio-filtration is used for cleaning storm-water run-off
- Pervious surfaces are used to reduce stormwater run-off.
- Excavation is minimized
- To reduce storm-water run-off, new paths are gravel (but still accessible), paver and concrete surfaces are pervious, and existing gravel and lawn parking areas remain
- "Green roofs" are a possibility to help further reduce impervious surfaces

THE PAST AT PRESENT – the Cultural Landscape

Challenge

History and the cultural landscape should influence architectural design, to link us to what came before and speak to what might come in the future. This principle borrows from the title of a book, "The Past at Present in Issaquah, Washington", by Edwards R. Fish.

Response

- Building designs have a sense of timelessness and are neither arbitrarily nostalgic nor ambitiously contemporary
- Building designs recognize diverse cultural influences: Native American tribes, coal mining, farm buildings, Northwest Architecture

REDUCE, REUSE, RECYCLE - Sustainable Design

Challenge

Minimize the resource impacts of construction and operations of new development.

Response

- The narrow buildings and operable windows and doors facilitate natural cooling and daylighting
- The simple building forms and designs are based on 2' and 4' modules to reduce material waste
- Buildings are designed for minimal excavation (see, in particular, the Restaurant / Family Center)
- Materials will be selected considering energy consumption, local production, post-consumer product use, ability to be recycled, embodied energy, and air quality impacts
- Specifications will include a detailed construction waste management plan
- We will recommend that projects achieve, at minimum, a LEED Silver Certification

VIEWS INTO, THROUGH AND AROUND

Challenge

Maximize views of the lake and the park and allow indoor activities to be seen.

Response

- Our designs have a lot of glass at the ground floor of buildings, so they can be seen through and to see the activities within
- We have provided overhead and folding doors that open up to connect indoors and outdoors
- The buildings are designed with narrow sides parallel and long- axes perpendicular to the beach, the woods and to distant outlooks, thereby minimizing impacts to views

A PARK OF COUSINS

Challenge

To create designs for varied sites, programs, and scales that, despite these differences, make the park whole.

Response

- The designs of the buildings have similar forms, materials, and color that reflect the park and the Northwest
- Similar details thread through and tie together the buildings at the different sites
- The metaphor for our aesthetic strategy is "A Park of Cousins," conveying a sense of both differences and similarities

MAKE MEMORIES

Challenge

Make places that support good times and good memories, to promote use of the park, today and into the future.

Response

- There are places, within and outside of buildings, for small group gatherings, planned and spontaneous
- There are places, within and outside of buildings, for large public and private events
- The architecture is in line with our shared history and understanding of buildings of this region

ON BUDGET OR ELSE

Challenge

The competition provides for reasonable budgets for each part of the project. Adhering to these will require further analysis of construction details and, in particular, foundation design.

Response

- We have been responsive to the budgets presented
- The simple building forms and designs that are based on 2' and 4' modules are cost effective
- Buildings are designed for minimal excavation. Further study will determine whether existing fill can be compacted and used as structural fill
- Materials will be selected considering first and long-term costs
- Pre-manufactured buildings are used at long-span conditions at the pools and Soccer Arenas
- The building designs allow natural ventilation of all primary use rooms. Public spaces that might need supplemental cooling are the Restaurant, meeting / exercise rooms at the Boathouse, and the Gathering Hall at the Lodge

DIVERSE VIEWPOINTS / OPEN PROCESS

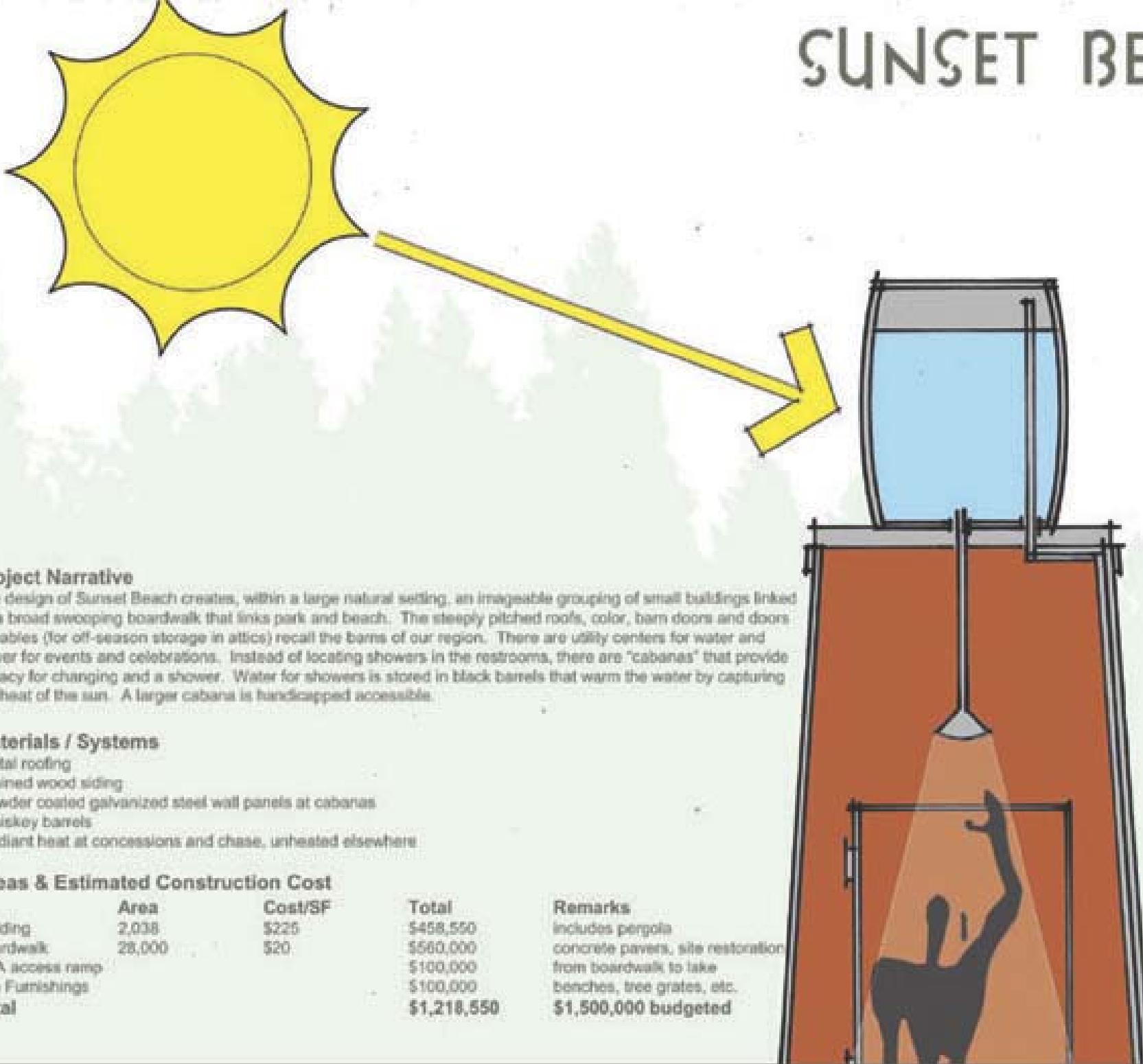
Challenge

Recent planning for the park has raised the interest and concerns of stakeholders with varied viewpoints about what is best for the park and its visitors.

Response

- The preceding planning and design principles address some of the viewpoints that have been expressed
- However, the principles are not enough on their own. The State and its consultants must engage public conversations and detailed regulatory review to assure that development in the Park is responsive at all levels including environmental, financial and aesthetic

SUNSET BEACH

**Project Narrative**

The design of Sunset Beach creates, within a large natural setting, an imaginative grouping of small buildings linked by a broad swooping boardwalk that links park and beach. The steeply pitched roofs, color, barn doors and doors at gables (for off-season storage in attics) recall the barns of our region. There are utility centers for water and power for events and celebrations. Instead of locating showers in the restrooms, there are "cabanas" that provide privacy for changing and a shower. Water for showers is stored in black barrels that warm the water by capturing the heat of the sun. A larger cabana is handicapped accessible.

Materials / Systems

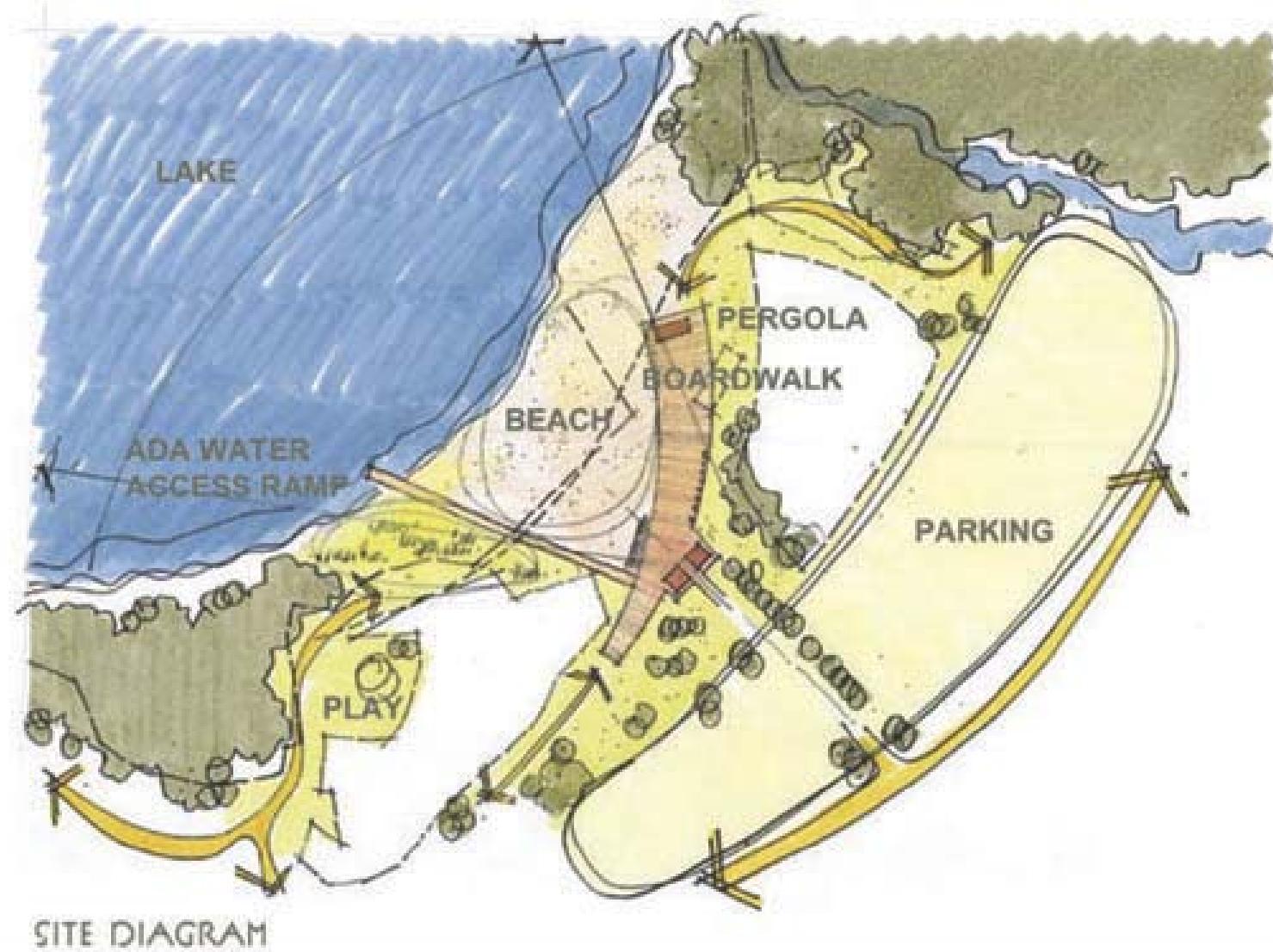
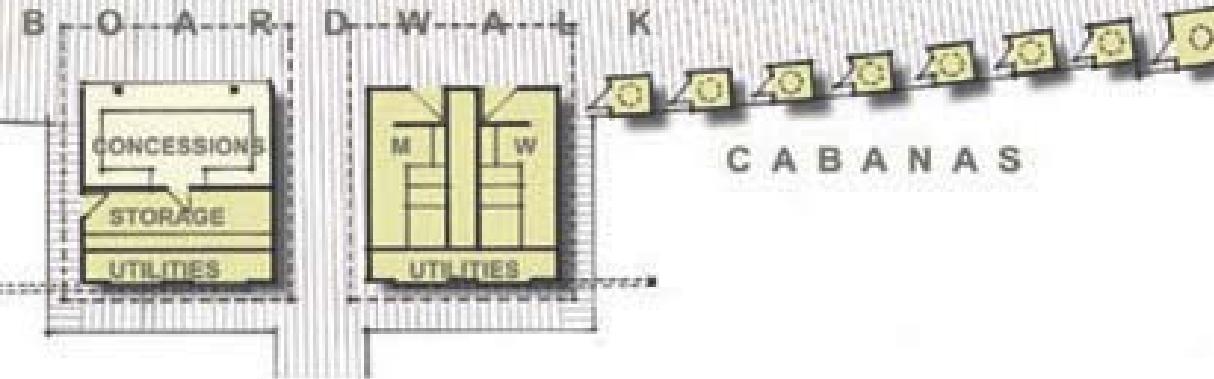
Metal roofing
Stained wood siding
Powder coated galvanized steel wall panels at cabanas
Whiskey barrels
Radiant heat at concessions and chase, unheated elsewhere

Areas & Estimated Construction Cost

	Area	Cost/SF	Total	Remarks
Building	2,036	\$225	\$458,550	includes pergola
Boardwalk	28,000	\$20	\$560,000	concrete pavers, site restoration
ADA access ramp			\$100,000	from boardwalk to lake
Site Furnishings			\$100,000	benches, tree grates, etc.
Total			\$1,218,550	\$1,500,000 budgeted

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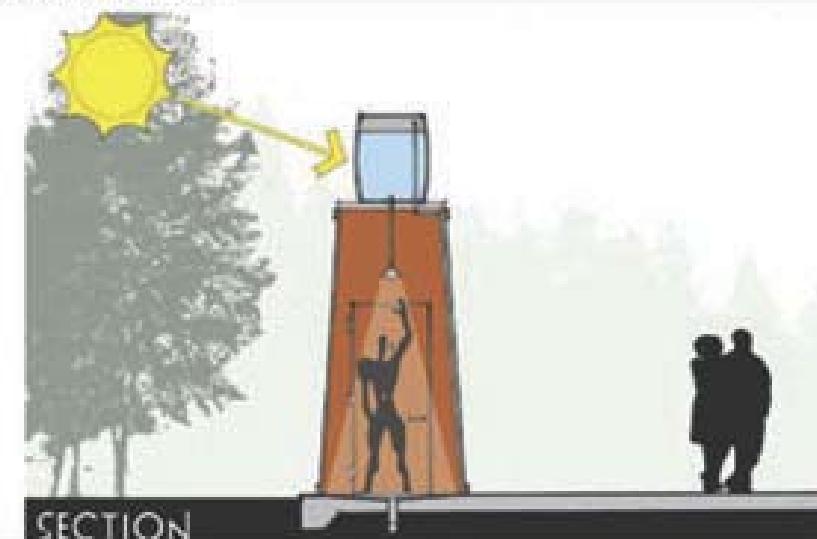
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SOUTH ELEVATION - VIEW FROM PARK



NORTH ELEVATION - VIEW FROM BEACH



SECTION

RESTAURANT / FAMILY CENTER

Project Narrative

The Restaurant / Family Center and the Rowing / Kayaking Boathouse together form the Waterfront Activity Center. The Restaurant / Family Center is organized with the Restaurant to the north, for the best lake views, and the Family Center is to the south, to take advantage of south sun and to enliven an outdoor plaza. Café and concessions are in the middle and easily accessed. The Restaurant features a lobby bar and dining area, made intimate by natural wood finishes and floor level changes, open to a semi-private terrace for outdoor dining. Upper level meeting rooms, with glass doors and a balcony for gathering afford great lake views. At the Family Center, pools are four feet above grade to avoid the shallow groundwater. The kid's party room opens to the pool house, and there is a south facing deck for sunning and spa use. Carefully located return air ducts provide optimal indoor air quality. The uniquely shaped teen center is located near the café, to create café culture. It is a special place to get to know others and one's self and deal with teen angst. It could be - dare we say it - the Eggstential Lounge.

Materials / Systems

- Exposed wood structure and decking at Restaurant
- Aluminum overhead doors and windows for ventilation & daylight
- Manufactured pool tank construction, above grade, super insulated
- Kitchen exhaust air used to pre-heat pool water
- Ground source heat pumps using the water table as a resource
- Pre-manufactured steel structure at Family Center
- Radiant heat and natural ventilation where appropriate
- Metal roofing and stained wood siding

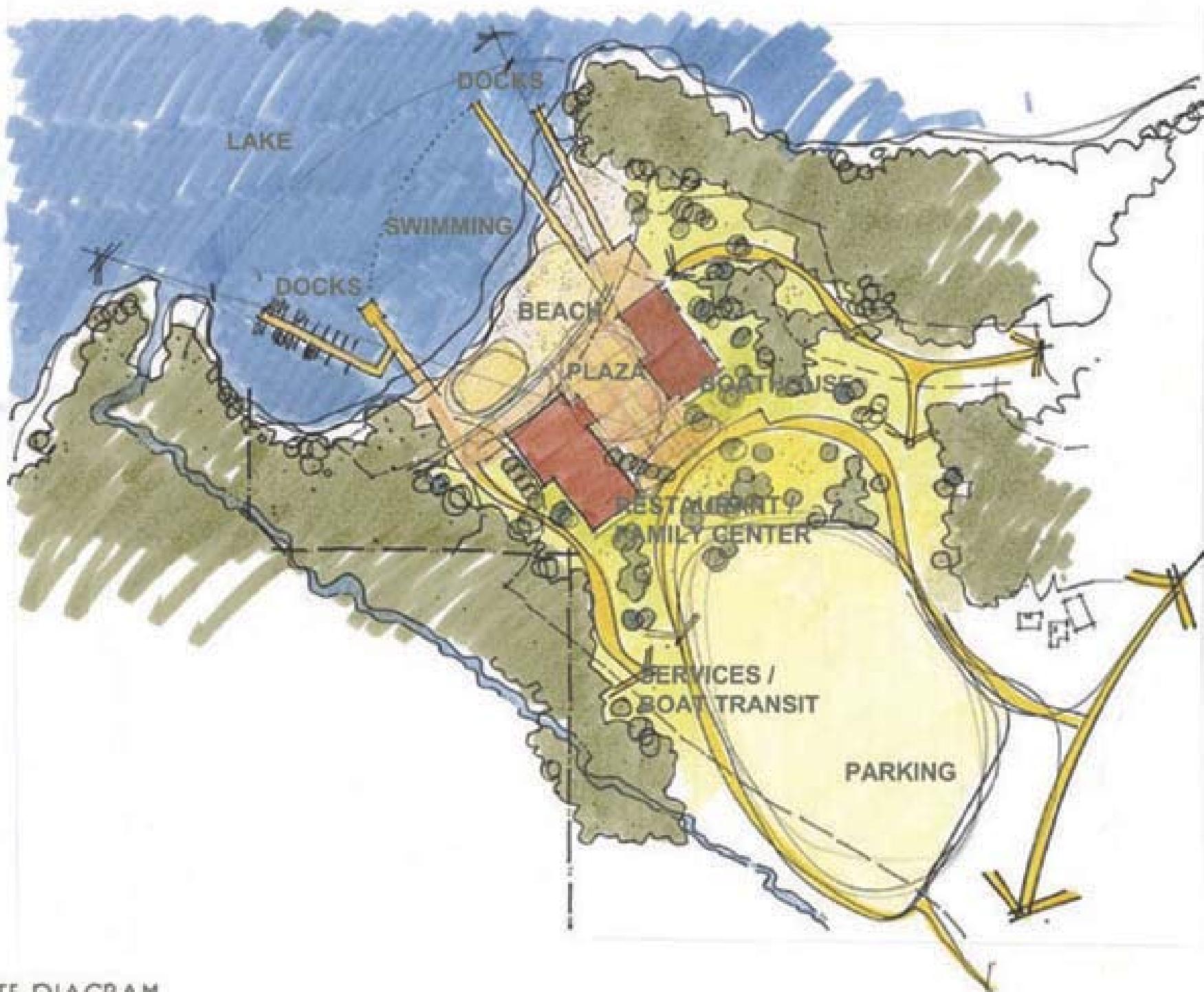
Areas & Estimated Construction Cost

	Area	Cost/SF	Total	Remarks
Lower Level	21,300	\$195	\$4,153,500	pre-eng pools and pool house
Upper Level	5,280	\$165	\$871,200	like community center costs
Deck	1,800	\$15	\$27,000	
Total			\$5,051,700	\$5,000,000 budgeted



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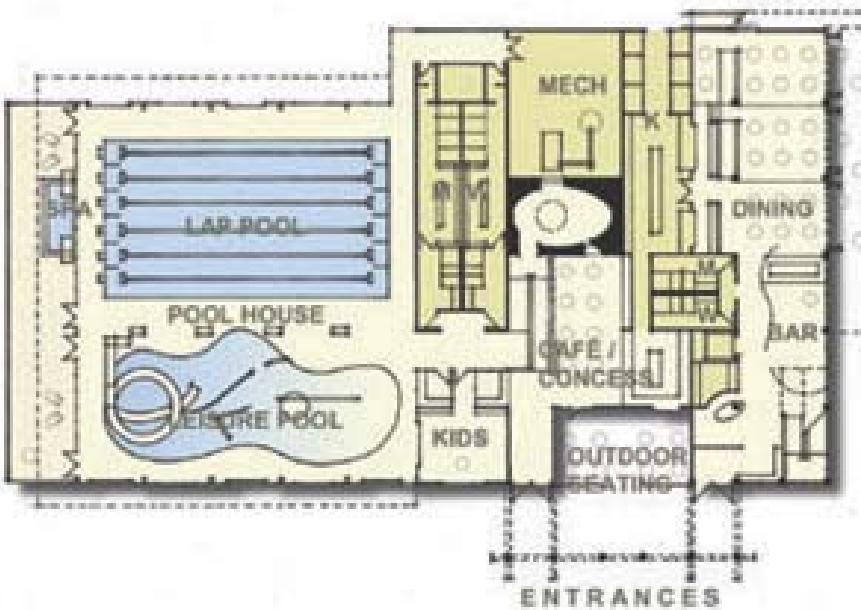
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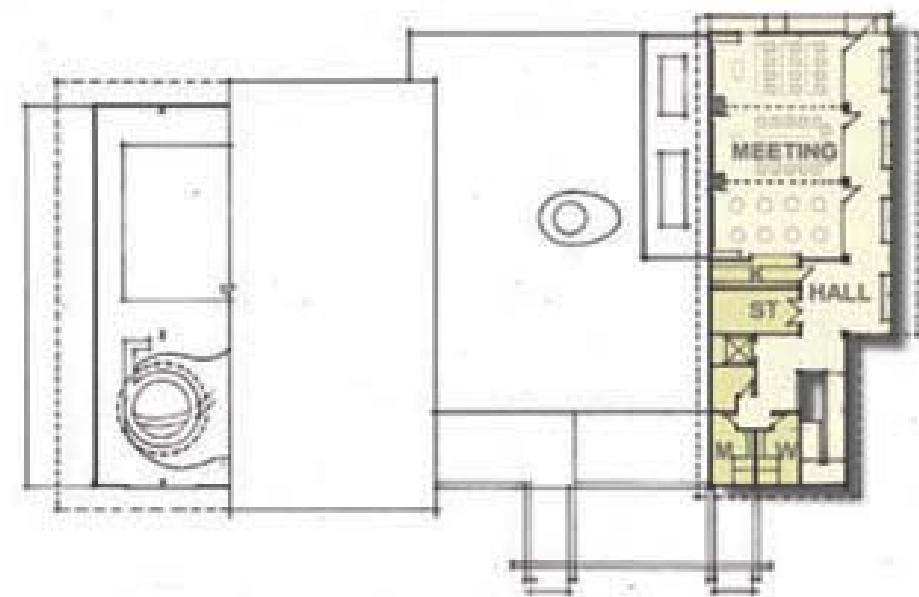
SITE DIAGRAM

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GROUND FLOOR PLAN



UPPER FLOOR PLAN

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EAST ELEVATION - VIEW FROM BOATHOUSE



SECTION - VIEW LOOKING WEST



NORTH ELEVATION - VIEW FROM LAKE

ROWING / KAYAKING BOATHOUSE

Project Narrative

The Boathouse is organized with the lobby and boats at grade level and meeting, exercise and support uses at the upper level. The seven boat bays and one repair bay are stacked end to end like the Lake Washington Rowing Club in Fremont. The arrangement keeps building width to a minimum and provides direct access from bays to apron to lake. Bay doors open to reveal views through the building and enhance natural ventilation. Windows provide views of boats, rowers and paddlers, to enliven the plaza. Exterior restrooms are centrally located. The upper level is organized simply, with meeting / exercise rooms located to the north for views of the lake and access to a deck. Each room is accessible without going through another. There are views from the second level into the bays below to remind people that the building is all about boats. More space is given to the women's locker room since more women row than men.

Materials / Systems

- Exposed wood structure
- Wood decking at meeting/exercise and lobby ceilings
- Metal roofing and stained wood siding
- Aluminum overhead doors and windows for ventilation & daylight
- Radiant floor heat and natural ventilation at upper level
- Boathouse is unheated

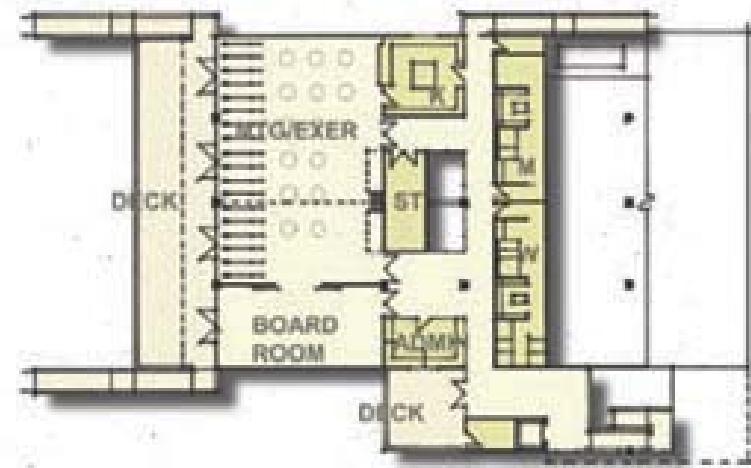
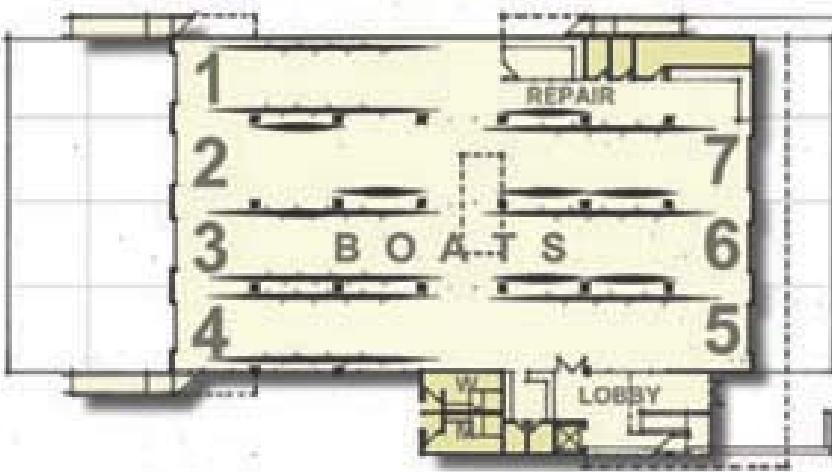
Areas & Estimated Construction Cost

	Area	Cost/SF	Total	Remarks
Boathouse: Boats	11,200	\$80	\$896,000	unheated
Boathouse: Other	7,500	\$150	\$1,125,000	heated, natural ventilation
Deck	1,800	\$5	\$9,000	membrane decking
Total			\$2,030,000	\$1,995,950 budgeted
Restroom	400	\$150	\$60,000	cost shared with others



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SECTION - VIEW LOOKING EAST

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NORTH ELEVATION - VIEW FROM LAKE



WEST ELEVATION - VIEW FROM FAMILY CENTER

INDOOR SOCCER ARENA

Project Narrative

The Indoor Soccer Arena's simple design will help make this facility a financial success. Important relationships are easy access from parking; a centrally located transaction area that everyone needs to go by, and equal access to each field. The transaction area includes a snack bar and pro-shop and the meeting room is nearby. The fields have a cab-style seating area between them. A terrace to the east serves the adjacent open space, which is large enough for outdoor fields, if desired. Another terrace and exterior restrooms are to the south. The structure is a pre-manufactured steel building. Translucent windows and panels provide extensive daylighting and overhead doors provide cross ventilation. Consider a future indoor track, for viewing and exercise, and a "green roof," to reduce impervious area.

Materials / Systems

- Pre-manufactured steel structure
- Metal roofing, if green roof not affordable
- Metal siding and concrete masonry veneer
- Aluminum overhead doors and windows for ventilation & daylight
- Artificial turf
- Radiant heat above bleachers, team benches and transaction area
- Radiant heat at floor at locker rooms and meeting
- Green roof and future track (not within budget)

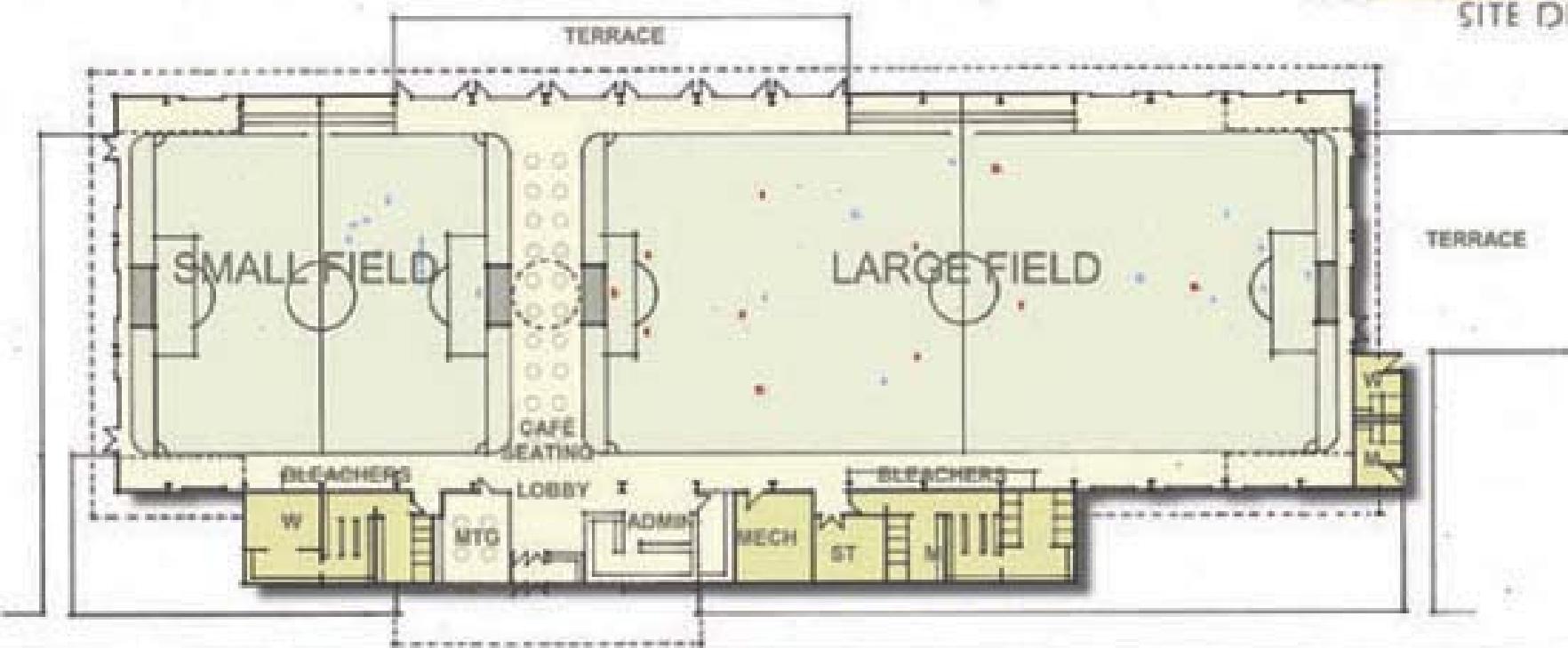
Areas & Estimated Construction Cost

	Area	Cost/SF	Total	Remarks
Soccer Arena	39,100	\$50	\$1,955,400	includes exterior restrooms
Total			\$1,955,400	\$2,000,000 budgeted
Green Roof	33,450	\$7	\$234,192	extensive (shallow) type
Track			\$250,000	not in budget



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PLAN

LAKE SAMMAMISH STATE PARK

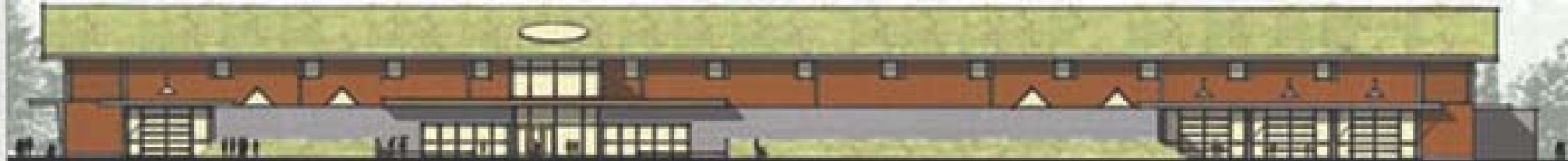
ARC
MACLEOD RECKORD



SECTION - VIEW LOOKING NORTH



SOUTH ELEVATION - VIEW FROM PARK



WEST ELEVATION - VIEW FROM PARKING

RUSTIC RETREAT CENTER

Project Narrative

The Rustic Retreat Center's design minimizes site impacts and maximizes social interaction. The buildings are grouped at the west end of the glade to preserve site area. The Lodge has a fabulous lounge and dining area with an arbor-like structure of peeler poles (a reference to Native longhouses and park and camp architecture), a fireplace / barbecue, and views of nature. A shoji-screen can be moved to create a gathering hall for large events. One and two-story cabins are located where glade turns to woods. Porches, living rooms, dressing areas, and bedrooms for eight are common features. A hinged plywood wall moves out of the way for larger groups. Beds on platforms are designed for seeing and talking to each other, to create memories and relationships. The two-story cabins provide variety, preserve site area, and save money by reducing foundation and roof construction. A program note: Two comfort stations with showers are located within cabin groupings, for convenience. They would have composting toilets.

Materials / Systems

- Peeler poles and wood decking at dining and lounge
- Metal roofing and stained wood siding
- Fiberglass windows and doors outside, for ventilation
- Wood doors and frames inside
- Radiant heat at floor at the lodge
- Propane, direct-vent fireplaces for most cabins and fans for air circulation

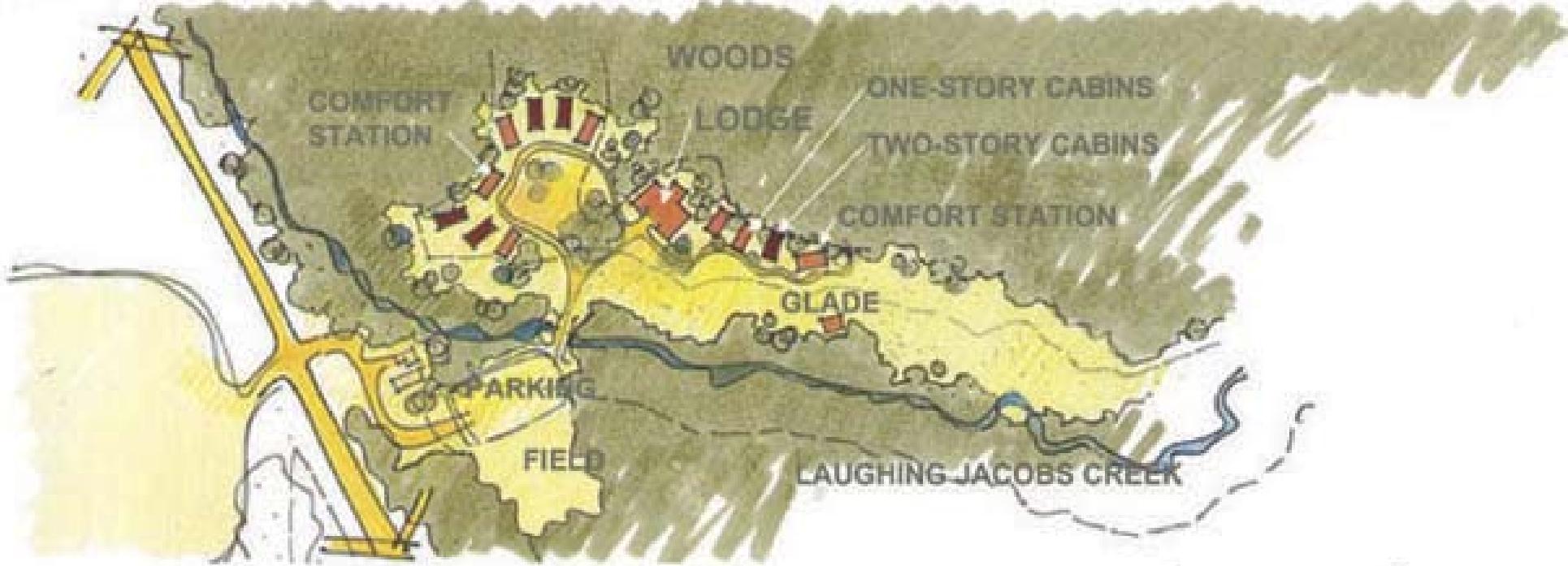
Areas & Estimated Construction Cost

	Area	Cost/SF	Total	Remarks
(5) 1-Story Cabins	3,200	\$50	\$160,000	CHOOSE each
(5) 2-Story Cabins	6,400	\$45	\$288,000	1,280SF each (10 units)
Porches/Stairs	2,000	\$12	\$24,000	excludes back porches
Lodge	3,360	\$180	\$604,800	manuf trusses, no showers
(2) Comfort Stations	400	\$175	\$70,000	2WC's, 2 showers for each
Total			\$1,146,800	\$1,130,000 budgeted



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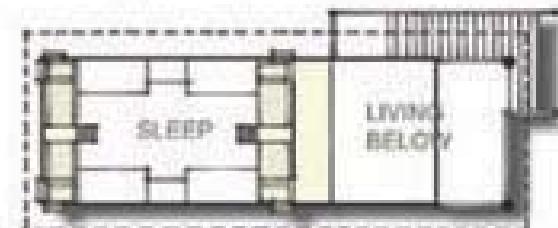
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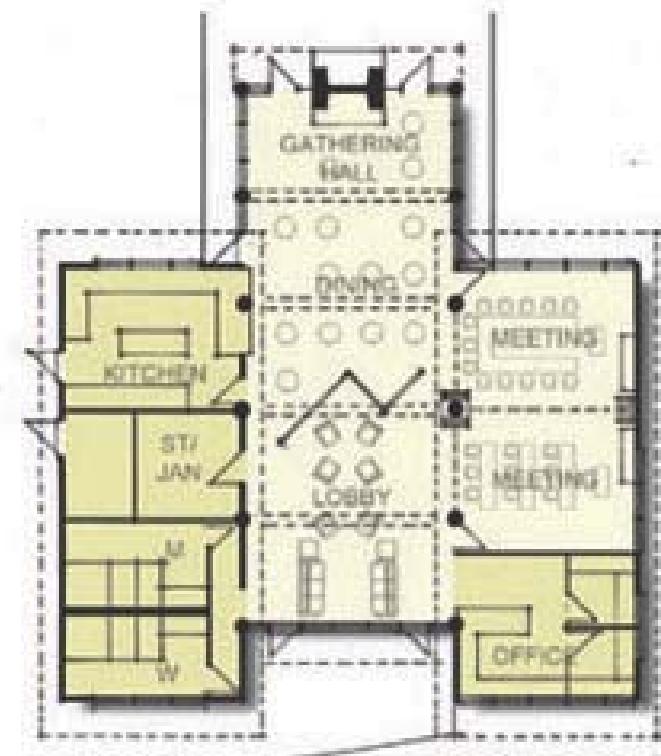
SITE DIAGRAM



TYPICAL CABIN PLAN



LOFT LEVEL CABIN PLAN



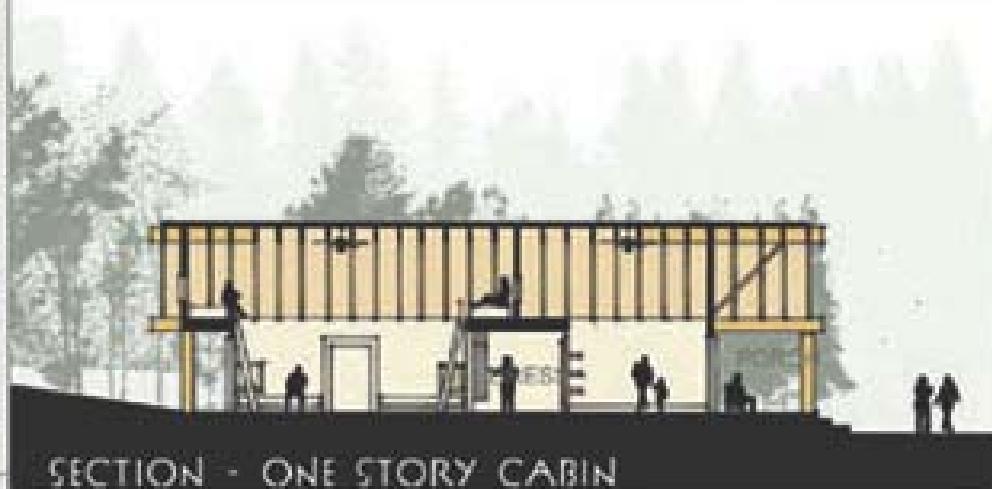
LODGE PLAN

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ELEVATION - ONE AND TWO STORY CABINS



SECTION - ONE STORY CABIN



SECTION - TWO STORY CABIN

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LODGE - VIEW FROM GLADE



SECTION - LOOKING TOWARDS MEETING